



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2013-0687; Directorate Identifier 2012-NM-118-AD; Amendment 39-17767; AD 2014-04-08]**

**RIN 2120-AA64**

**Airworthiness Directives; Bombardier, Inc. Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for all Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. This AD was prompted by reports of burr marks on the primary wheels, and cracked rings on the primary wheel shaft, on certain horizontal stabilizer trim actuators (HSTAs). This AD requires replacing certain HSTAs. We are issuing this AD to prevent burr marks on the primary wheels, and cracked rings on the primary wheel shaft, on certain HSTAs, which may lead to a disconnect of the pitch trim surface and subsequent loss of pitch control, resulting in loss of control of the airplane.

**DATES:** This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may examine the AD docket on the Internet at

<http://www.regulations.gov/#!docketDetail;D=FAA-2013-0687>; or in person at the Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email [thd.crj@aero.bombardier.com](mailto:thd.crj@aero.bombardier.com); Internet

<http://www.bombardier.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

**FOR FURTHER INFORMATION CONTACT:** Cesar Gomez, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone (516) 228-7318; fax (516) 794-5531.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Bombardier, Inc. Model CL-600-2B19 (Regional

Jet Series 100 & 440) airplanes. The NPRM published in the Federal Register on August 13, 2013 (78 FR 49227). The NPRM was prompted by reports of burr marks on the primary wheels, and cracked rings on the primary wheel shaft, on certain HSTAs. The NPRM proposed to require replacing certain HSTAs. We are issuing this AD to prevent burr marks on the primary wheels, and cracked rings on the primary wheel shaft, on certain HSTAs, which may lead to a disconnect of the pitch trim surface and subsequent loss of pitch control, resulting in loss of control of the airplane,

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2012-18, dated May 29, 2012 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

It was discovered that a number of primary wheels on the HSTA P/N [part number] 601R92305-5 (or vendor P/N 8396-4) had burr marks. Investigation revealed that the burr marks were a result of incorrectly using the manufacturing process. In addition, some rings that were fitted on the primary wheel shaft were found cracked. If not corrected, this condition may lead to a disconnect of the pitch trim surface and subsequent loss of pitch control.

This [Canadian] AD mandates the removal of the affected units that have the above described manufacturing defect.

Corrective actions include replacement of certain HSTAs. You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov/#!documentDetail;D=FAA-2013-0687-0003>.

## **Comments**

We gave the public the opportunity to participate in developing this AD. We have considered the comment received. The following presents the comment received on the proposal (78 FR 49227, August 13, 2013) and the FAA's response to the comment.

### **Request to Revise the Applicability**

Air Wisconsin Airlines requested that we limit the applicability of the NPRM (78 FR 49227, August 13, 2013) to Model CL-6-2B19 (Regional Jet Series 100 & 440) airplanes "equipped with HSTAs having part number (P/N) 601R92305-5 or vendor P/N 8396-4, with serial numbers (S/N)s as identified in paragraph (g) of this AD."

We disagree with the commenter's request. The intent of the applicability in the NPRM (78 FR 49227, August 13, 2013) and this final rule was to capture all possible airplanes that could have an affected HSTA, or on which an affected HSTA could be installed in the future. This issue was coordinated with TCCA.

The parts installation limitation, which applies to all Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, is retained in this final rule. This provision matches the intent of Canadian AD CF-2012-18, dated May 29, 2012. We have made no changes to this final rule in this regard.

Also, we have specified serial numbers 7003 and subsequent (which includes all serial numbers) in paragraph (c) in this final rule, which corresponds with the Applicability of Canadian AD CF-2012-18, dated May 29, 2012.

## **Conclusion**

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (78 FR 49227, August 13, 2013) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (78 FR 49227, August 13, 2013).

## **Costs of Compliance**

We estimate that this AD affects 575 airplanes of U.S. registry.

We also estimate that it will take about 19 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts will cost about \$0 per product. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$928,625, or \$1,615 per product.

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by

prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov/#!docketDetail;D=FAA-2013-0687>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any

comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new AD:

**2014-04-08 Bombardier, Inc.:** Amendment 39-17767. Docket No. FAA-2013-0687; Directorate Identifier 2012-NM-118-AD.

#### **(a) Effective Date**

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to all Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, certificated in any category, serial numbers 7003 and subsequent.

**(d) Subject**

Air Transport Association (ATA) of America Code 27, Flight Controls.

**(e) Reason**

This AD was prompted by reports of burr marks on the primary wheels, and cracked rings on the primary wheel shaft, on certain horizontal stabilizer trim actuators (HSTAs). We are issuing this AD to prevent burr marks on the primary wheels, and cracked rings on the primary wheel shaft, on certain HSTAs, which may lead to a disconnect of the pitch trim surface and subsequent loss of pitch control, resulting in loss of control of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Inspection**

Within 1,000 flight hours or 4 months after the effective date of this AD, whichever occurs first, inspect to determine if any HSTA having part number (P/N) 601R92305-5 or vendor P/N 8396-4, with serial numbers (S/N)s 287, 724, 813, 841, 998, 1031, 1035, 1049, 1053, 1067, 1068, 1136, 1252, 1268, 1303, 1319, 1338, 1354, 1374, 1378, 1445, 1470, 1498, 1513, 1546, 1632, 1736, 1766, 1846, 1849, 2002 through 2009, 2011, 2013 through 2016, 2019, 2020, and 2022 is installed. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number of the HSTA can be conclusively determined from that review.

**(h) Replacement**

Within 1,000 flight hours or 4 months after the effective date of this AD,



whichever occurs first, replace any affected HSTA identified in paragraph (g) of this AD with a serviceable HSTA, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 601R-27-159, dated June 15, 2011.

**(i) Parts Installation Limitations**

As of the effective date of this AD, no person may install any HSTA having P/N 601R92305-5 or vendor P/N 8396-4 with a serial number listed in paragraph (g) of this AD, unless the serial number has the suffix “A” beside it.

**(j) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, New York Aircraft Certification Office, (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

**(2) Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved.

Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

**(k) Related Information**

Refer to Mandatory Continuing Airworthiness Information Canadian Airworthiness Directive CF-2012-18, dated May 29, 2012, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov/#!documentDetail;D=FAA-2013-0687-0003>.

**(l) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier Service Bulletin 601R-27-159, dated June 15, 2011.

(ii) Reserved.

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email [thd.crj@aero.bombardier.com](mailto:thd.crj@aero.bombardier.com); Internet <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on February 10, 2014.

Jeffrey E. Duven,  
Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2014-03825 Filed 02/28/2014 at 8:45 am; Publication Date: 03/03/2014]